Approaches To Dropout Prevention: Heeding Early Warning Signs With Appropriate Interventions

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National High School Center

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Sobering Statistics…

- Nearly one-third of all high school students leave the public school system before graduating
- 1.2 million students drop out of high school each year – that's 12 million over the next decade
- 7,000 students drop out of high school every day
- 15% of the high schools in the U.S. produce 50% of our dropouts – schools Balfanz and Legters call "dropout factories"

Balfanz, R. and Legters, N. (2006, July 12). The graduation rate crisis we know and what can be done about it. Retrieved online from http://web.jhu.edu/CSOS/graduationgap/edweek/Crisis_Commentary.pdf

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Economic Consequences

- A new high school dropout in 2000 had less than a 50% chance of getting a job
- That job earned less than half of what the same job earned 20 years ago
- Lack of education is strongly correlated with welfare dependency and incarceration
- Cutting the number of dropouts in half would reap $45 billion in revenues and decreased costs (Levin et al., 2007)

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2008 IES Practice Guide on Dropout Prevention

1) **Utilize data systems** that support a realistic diagnosis of the number of students who drop out and that help **identify individual students at high risk of dropping out**
2) **Assign adult advocates** to students at risk of dropping out
3) **Provide academic support and enrichment** to improve academic performance
4) Implement programs to **improve students' classroom behavior and social skills**
5) **Personalize** the learning environment and instructional process
6) **Provide rigorous and relevant instruction** to better engage students in learning and provide the skills needed to graduate and to serve them after they leave school

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Early Warning Systems

Early warning systems (EWS) use readily available data housed at the school to:

- Predict which students are at-risk for dropping out of high school
- Target resources at the school and district level to support off-track students while they are still in school, before they drop out
- Examine patterns and identify school climate issues that may contribute to disproportionate dropout rates at a subset of high schools or within subpopulations of students

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9th Grade is a Critical Year

- Ninth grade is a "make or break year"
  - More students fail 9th grade than any other grade in high school
  - A disproportionate number of students who are held back in 9th grade subsequently drop out
- By the end of 9th grade or even during the first semester, powerful indicators exist that can predict whether students will complete high school:
  - Engagement
  - Course performance
  - Chicago's "On-Track" Indicator

Herlihy, C. (2007). *State and district-level supports for successful transition into high school*. Washington, DC: National High School Center.

Allensworth, E., & Easton, J.Q. (2007). *What matters for staying on-track and graduating in Chicago Public High Schools: A close look at course grades, failures and attendance in the freshman year*. Chicago: Consortium on Chicago School Research.

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Key 9th Grade Indicators

Engagement

- Attendance/ absenteeism

Course Performance

- Course grades
- Number of credits earned

"On-track" Indicator

- Core course performance & accumulated credits

Research from several U.S. school districts provides a strong foundation for defining 9th grade warning signs that students might drop out, but local adaptation is key

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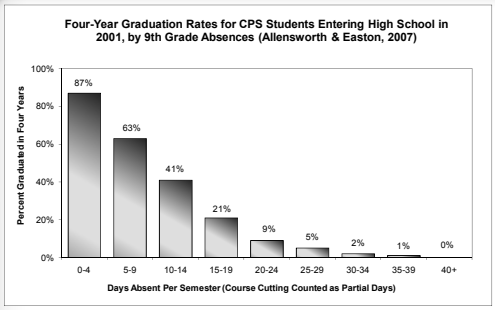
"High-Yield" Academic Indicators: Attendance



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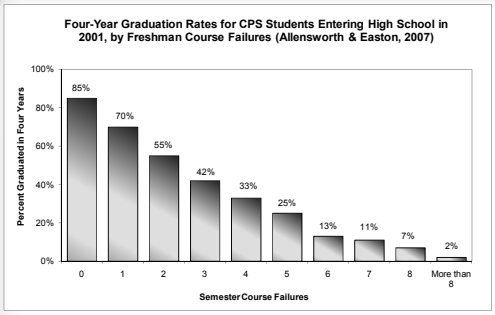
"High-Yield" Academic Indicators: Course Failures



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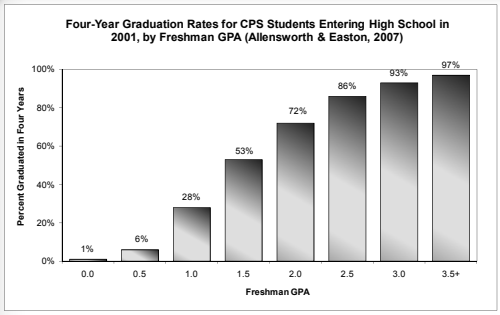
"High-Yield" Academic Indicators: GPA



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Chicago's "On-track" Indicator

Students are "on-track" if they:

1. have not failed more than one semester long core course, AND
2. have accumulated enough credits for promotion to the 10th grade.

Number of Semesters with Fs in Core Courses	# of Credits Accumulated Freshman Year	
	Less than 5	5 or more
2 or more courses	Off-track	Off-track
0 or 1 courses	Off-track	On-track

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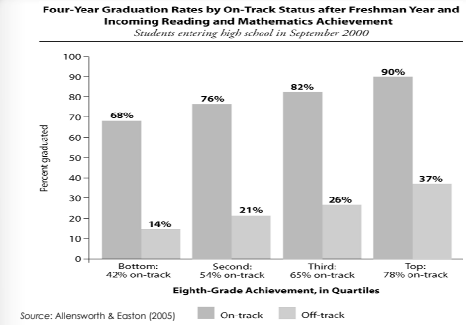
On-Track Indicator



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"High Yield" 9th Grade Indicators

Indicators	Benchmark (red flag)
Absenteeism	Missing 10% or more of instructional time
Course failures	One of more failed courses
Grade point average	2.0 or lower (on a 4-point scale)
"Off-track"	Fail two or more semester core courses, or accumulate fewer credits than the number required for promotion to the 10th grade

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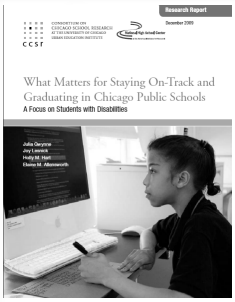
Students with Disabilities



Freshman year course performance—more than background characteristics such as race, gender, socioeconomic status or prior achievement—predict which students with disabilities are most at risk for dropping out of high school

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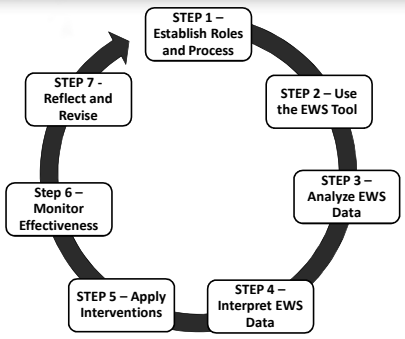
Implementing the EWS Process



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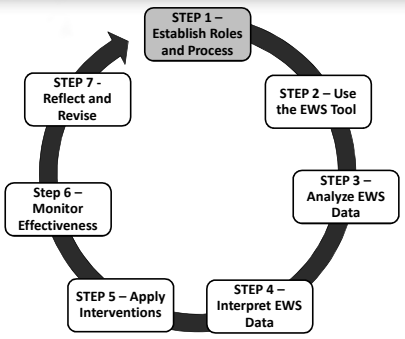

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Step One: Establish Roles and Process

EWS teams should include school- and district-level individuals who have:

- Authority to make decisions
- Knowledge of diverse students
- Expertise to manage and analyze data
- Information about strategies

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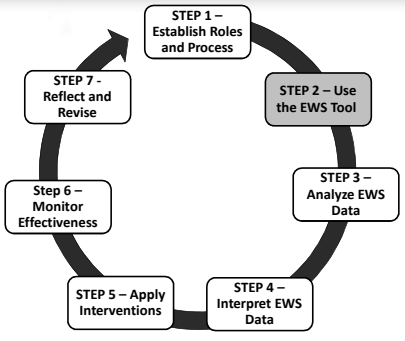
Implementing the EWS Process



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Step Two: Use the EWS Tool

- Routinely available data are good predictors of whether a student is likely to drop out of high school
- First-month absences, in addition to end of the semester grades, are additional strong predictors of dropout
- The goal is to effectively and efficiently allocate dropout prevention resources to change the odds for students with a high propensity to drop out
  - Not all students at-risk will need all interventions available
  - Analysis of different patterns of risk can help target appropriately
  - EWS data = knowledge to make these decisions

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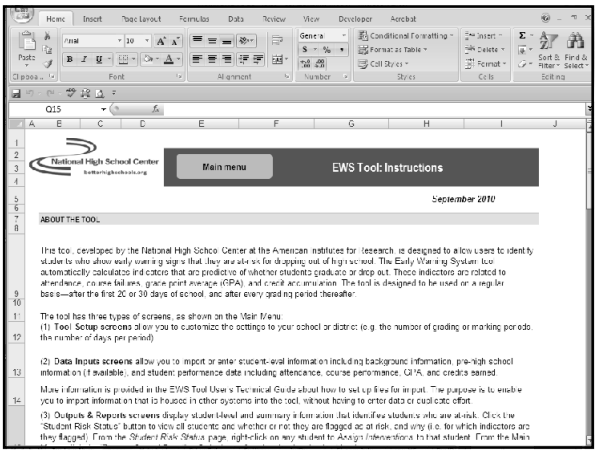

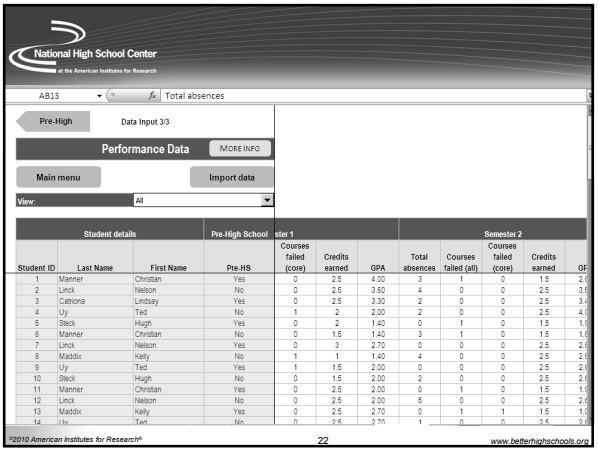

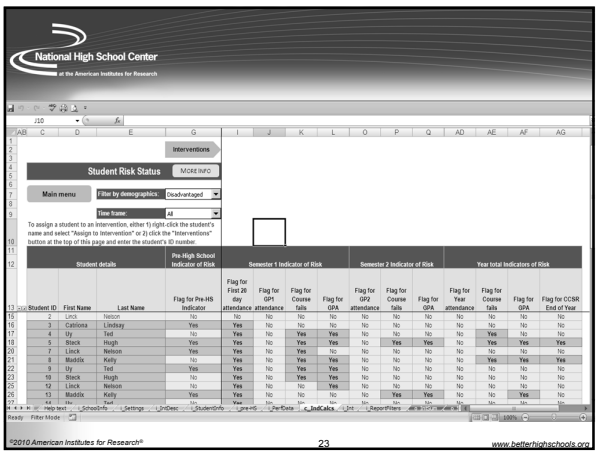

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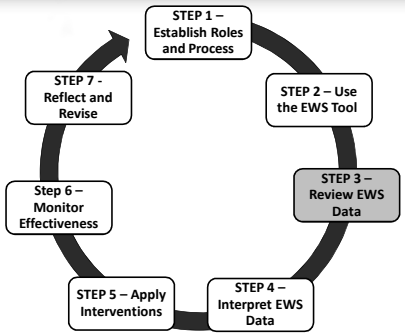

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Step Three: Review EWS Data

Goal is *Accurate* Identification of At-Risk Students, Based on Best Predictors

- The research on early warning signals provides a strong basis on which to ground an EWS – both the indicators and the "threshold" cut-off values.
- Local validation involves looking backward at previous cohorts of students to see which displayed these indicators, and which subsequently dropped out.

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Step Three: Review EWS Data

Questions about EWS data:

- *Student-level patterns:* What do your data tell you about individual students who are at-risk?
- *School-level patterns:* What do your data tell you about how the school is doing?
  - Are students who were flagged from the beginning remaining "off-track" through the year?
  - Are students who were flagged at one reporting period back "on-track" at the next?

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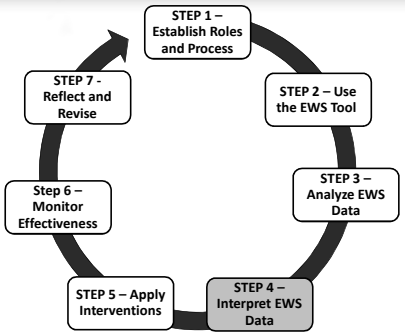
Implementing the EWS Process



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Step Four: Interpret EWS Data

Digging deeper than the indicators:

- Indicators are just observable signals, not root causes
- Characteristics of students who are flagged can further help target interventions at the appropriate intensity

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Why Do Youth Drop Out

- Academic challenges
- Lack of engagement and motivation
- Low expectations
- Limited parental involvement

In hindsight, young people who dropped out of school almost universally expressed great remorse for having left high school and expressed strong interest in re-entering school with students their age.

Bridgeland, et al, 2006

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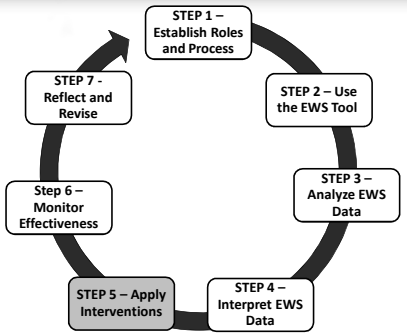
Implementing the EWS Process



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Step Five: Applying Interventions

- Focus on achievement in core courses
- Content recovery courses
- Tutoring as an academic support
- Tiered approaches
- Attendance and behavior monitors
- Advisories and team teaching
- Counseling and mentoring
- Small learning communities and school within a school for greater personalization
- Partnerships between high schools and feeder middle schools
- Ninth grade transition programs
- Support for students with disabilities outside of school
- Career and college awareness
- Family engagement
- Community engagement

Example Programs that incorporate this strategy:

ALAS
America's Choice
Career Academies
Check and Connect
Support Center for Adolescent Mothers (Family Growth Center)
Middle College High School
NGP
Quantum Opportunities Program
Teen Outreach Program

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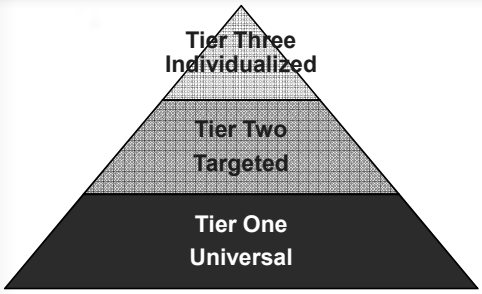
Tiered Approach to Dropout Prevention



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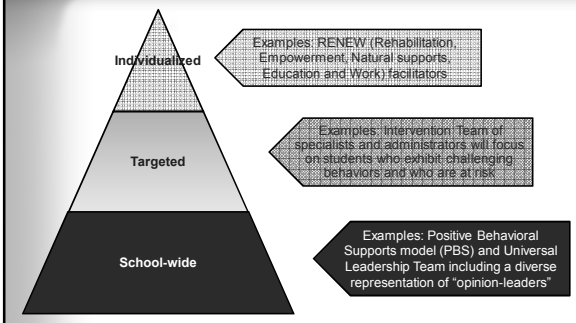
New Hampshire's Model



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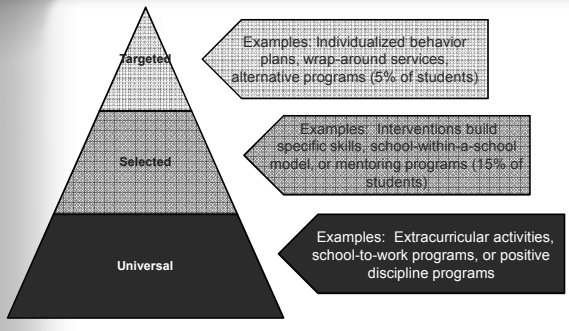
Minnesota's Model



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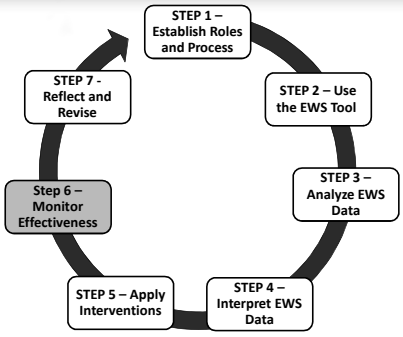

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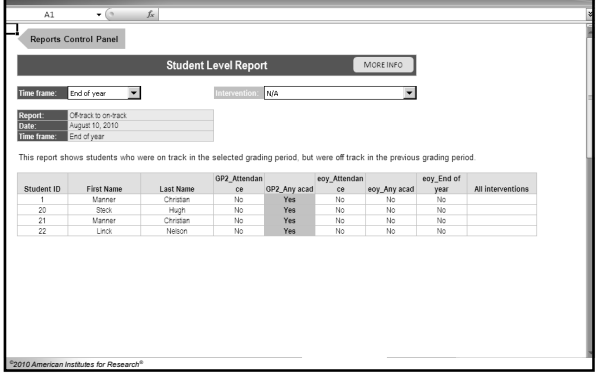
Step Six: Monitor Effectiveness



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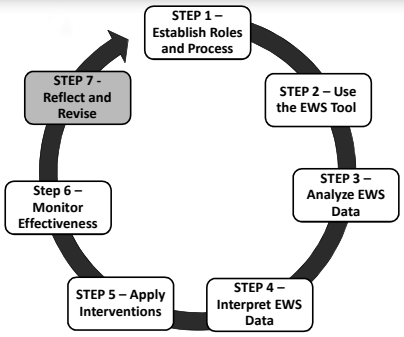

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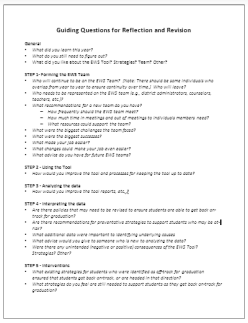
Step Seven: Reflect and Revise

- Regularly
- Collectively
- Systematically


Guiding Questions for Reflection and Revision

General
- What did you learn this year?
- What do you still need to figure out?
- What did you like about the EWS Tool? Strategies? Team? Other?

STEP 1 – Forming the EWS Team
- Who will continue to be on the EWS Team? (Note: There should be some individuals who overlap from year to year to ensure continuity of the time.) Who will leave?
- Who needs to be represented on the EWS team (e.g., district administrators, counselors, teachers, etc.)?
- What recommendations for a new team do you have?
  - How frequently should the EWS team meet?
  - How much time in meetings and out of meetings to individuals members need?
  - What resources could support the team?
- What were the biggest challenges the team faced?
- What were the biggest successes?
- What made your job easier?
- What changes would make your job even easier?
- What advice do you have for future EWS teams?

STEP 2 – Using the Tool
- How would you improve the tool and processes for reading the tool up to date?

STEP 3 – Analyzing the data
- How would you improve the tool reports, etc.?

STEP 4 – Interpreting the data
- Are there policies that may need to be revised to ensure students are able to get back on track for graduation?
- Are there recommendations for preventative strategies to support students who may be at risk?
- What additional data were important to identifying underlying issues
- What advice would you give to someone who is new to analyzing the data?
- Were there any unintended negative or positive consequences of the EWS Tool? Strategies? Other?

STEP 5 – Interventions
- What existing strategies for students who were identified as off-track for graduation ensures that students get back on track, or are needed in that direction?
- What strategies do you feel are still needed to support students as they get back on track for graduation?

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Step Seven: Reflect and Revise

- During the school year: Regularly, collectively, and systematically
- Over multiple school years: Validate the indicators to maximize predictive power of the system, e.g.

	Displayed Early Warning Sign in 9th Grade?	
Graduated in 4 (or 5) Years?	**YES**	**NO**
YES	*False Positive (or Effective Intervention)*	**Accurate Prediction**
NO	**Accurate Prediction**	*False Negative*

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Questions & Answers

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More Information:

Dropout Prevention Resources
www.betterhighschools.org/topics/DropoutPrevention.asp

Contact Information

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